DOCUMENT RESUME

ED 087 382 IR 000 110

TITLE	Report on the Stanford Instructional Television Network. Academic Years, 1969-70 Through 1972-73.
INSTITUTION	Stanford Univ., Calif. Stanford Instructional Television Network.
PUB DATE	Feb 74
NOTE	8p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Adult Education; Business Administration; Cooperative Programs; Engineering Education; Graduate Study; Higher Education; *Instructional Television; Job Training; Networks; Program Descriptions; School Industry Relationship; Science Education; Trend Analysis
IDENTIFIERS	ACE; Association for Continuing Education; *Stanford Instructional Television Network

ABSTRACT

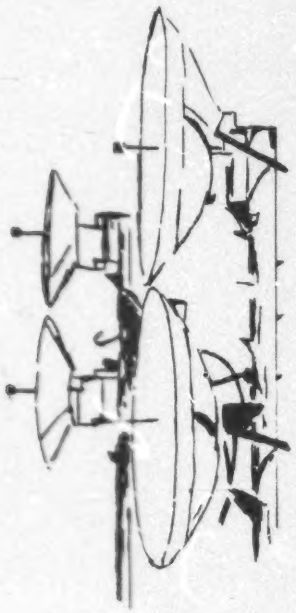
The Stanford Instructional Television Network has completed fours years of operation, broadcasting some 160 hours of live instruction per week over four Instructional Television Fixed Service channels. The Network was designed for use as an interactive system with a two-way FM audio link between the students in off-campus classrooms and the instructors at Stanford. During the period, the Network has experienced an excellent growth of membership, currently having 34 industry and four educational organizations affiliated. Each quarter some 40-45 graduate engineering and science courses are offered by Stanford faculty and many guests. Some videotaped courses are also available for use by auditors at distant locations. Member organizations have been finding this plan valuable as a source of technical updating, crosstraining, or retraining for their professional staff. While doing fulltime work at network member organizations, the Television students can take the program for credit or non-credit. Originally the ratio was 85 percent credit seeking to 15 percent non-credit students; now 28 percent of the students are seeking credit with 72 percent participating in the non-credit categories. (CH)

ED 087382

REPORT ON THE STANFORD INSTRUCTIONAL TELEVISION NETWORK

ACADEMIC YEARS
1969 - 70
THROUGH
1972 - 73

FEBRUARY 1974



IR

INTRODUCTION

The Stanford Instructional Television Network has completed four years of operation, broadcasting some 150 hours of live instruction per week over four Instructional Television Fixed Service (ITFS) channels.

Having survived a recession in the local industrial community, the Network has recently experienced excellent growth in new company memberships and course enrollments. Enrollments have increased 220% over the past four years, while income has increased 32%. The large difference in rate of growth between enrollments and income can be attributed to a significant change in the television student mix. Originally the ratio was 85% credit seeking to 15% non-credit students; now we find 28% of the Television students seeking credit with 72% participating in the non-credit student categories.

STUDENT CATEGORIES

Honors Cooperative Program (HCP):

HCP students are fully matriculated Stanford Graduate Students. They are working toward advanced degrees at Stanford on a half-time basis, while normally working full-time at network member companies.

Non-Registered Option (NRO)

NRO students have no formal affiliation with Stanford. They are studying by Television along with the regular graduate students. NRO's are graded by comparison with the credit students. Their grades may eventually count for credit, should they be admitted to Stanford for graduate study.

Television Auditor

These television students view televised graduate courses, are furnished lecture notes when available, but are not provided testing or grading by Stanford. Beginning Winter Quarter 1972, the fees for auditing was reduced substantially. The result was an increase from 30 to nearly 400 auditors per quarter.

Member organizations are finding this plan valuable as a source of technical updating, crosstraining, or retraining for their professional staff. Several companies have appointed qualified staff members to assist with problem sessions, testing and grading.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Television Auditor: Continued

The School of Engineering at Stanford is pleased to provide this service to so many engineers and scientists in the local community. With careful planning, this service may be expanded to serve engineers some distance from the campus through the use of videotape or satellite transmission.

COURSES AND ENROLLMENTS

Each quarter some 40 - 45 graduate engineering and science courses are offered by television. Normally, about 20 courses are presented each summer.

Courses are selected on the basis of degree requirements, student and company feedback, previous enrollment history, current popularity of topics and subject areas.

Year	No. of Courses	HCP	NRO	Auditor	Total	Average Course
1969-70	120	762	36	101	899	7.5
1970-71	146	830	109	98	1,037	7.1
1971-72	143	555	67	737	1,359	9.5
1972-73	145	564	94	1,321	1,979	13.6

FACULTY PARTICIPATION

Stanford faculty participation has been noteworthy. In the past four years some 210 individuals representing 18 departments and schools have lectured in televised courses. In addition, many guests have addressed the various weekly televised seminars.

Teaching on the Network is voluntary. Faculty are advised as to procedures and techniques, and are encouraged to take full advantage of the television medium. However, they are not expected to go through the typical television production process. The Network staff strives to handle technical and administrative details to the extent that faculty feel no extra burden. The goal is that they will find teaching over the Network a more pleasant experience than presenting their course in the conventional campus classroom. Following is a listing of departments and schools which have been represented on the Network.

Faculty Participation: Continued

School of Engineering

Aero and Astro
Applied Mechanics
Chemical Engr.
Civil Engr.
Electrical Engr.
Engr. Economic Systems
Industrial Engineering
Materials Science and Engr.
Mechanical Engr.
Operations Research

Graduate School of Business

School of Humanities and Sciences

Chemistry
Communications
Computer Science
Economics
Political Science
Stanford Law School
Stanford Medical School
Stanford Linear Accelerator Center

VIDEOTAPING

The Network was designed for use as a live interactive system. It is simple, however, to capture lectures on videotape - given the staff, equipment, materials and money to pay for it all.

Consideration is being given to issues of faculty rights and royalties; reasonable life of courses given the rapid change in technology; software and the copyright issue and general policy regarding use of Stanford courses off-campus.

To date we have provided 13 courses on videotape for use of auditors at distant locations of Network member companies. Response has been favorable, and the Network plans to continue experimenting with this program.

A separate experiment involves a group of courses which have been licensed for use by industry in Japan. Presently five engineering courses are being used there under this arrangement. Six more courses will be furnished during Autumn quarter 1973. The Network and faculty share in the royalties generated by this project.

We expect to gain valuable feedback from this program, while at the same time providing quality instruction in subject areas not readily available to students employed in Japanese industry.

ASSOCIATION FOR CONTINUING EDUCATION

"About ACE..." *

ACE is a non-profit corporation offering a variety of live, televised courses to employees of San Francisco Bay Area firms, which are members of the Stanford Instructional Television Network. Using the Stanford television facilities, ACE presents graduate courses leading to the Degree of Master of Business Administration which is awarded by Golden Gate University in San Francisco.

Undergraduate courses that prepare the student for admission to the MBA program are offered through the cooperation of the College of Notre Dame in Belmont, which sends their faculty to the Stanford University campus where the classes are presented.

A selection of graduate technical courses are presented through the cooperation of California State University at San Jose which deal with the futures-oriented subject of Cybernetic Systems. It is anticipated that these will develop into a series which will lead to an integrated Master of Science degree awarded by CSU at San Jose.

A series of 4 courses leading to a Certificate in Supervisory Management are scheduled regularly throughout the year. Other courses and special programs available through ACE are designed to meet specific education or training requirements of member firms and may be scheduled on request.

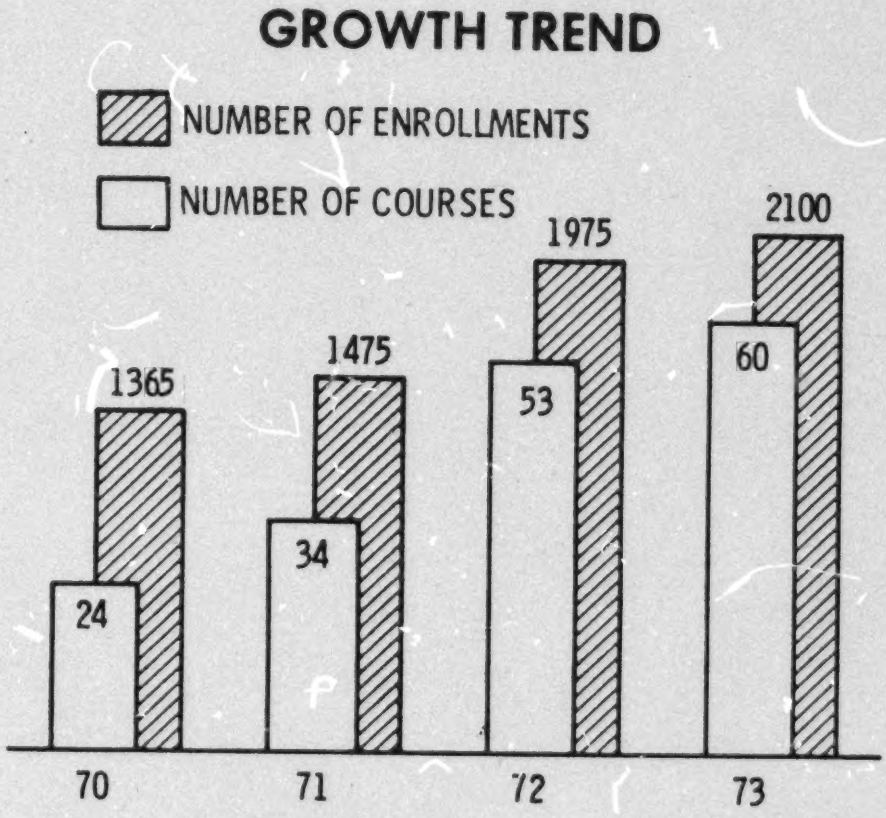
All programs of instruction originate at Stanford University and are broadcast to students where they work. The instruction is fully interactive with a 2-way FM audio link between the students in off-campus classrooms and the instructor at Stanford. Courses are normally scheduled from 7:00-8:00 AM, 12:00 (N)-1:00, and from 5:00-7:00 PM, Monday through Friday.

* Extracted from ACE Annual Report dated June 30, 1973, available upon request.

ASSOCIATION FOR CONTINUING EDUCATION

Annual Report - June 30, 1973

During the 12 month period ending June 30, 1973 ACE offered 60 courses with 2100 enrollments for an average class size of 35+ students. A comparisor with the number of courses and enrollments in previous years is illustrated below.



MEMBERSHIP

As of September 1, 1973, the Network had membership of 34 industry and 4 educational organizations.

Of the 34 industry members, 22 organizations were receiving televised instruction at 27 different locations in 85 television classrooms. San Jose State University has equipped two classrooms for use in its affiliation with the Association for Continuing Education.

STANFORD INSTRUCTIONAL TELEVISION NETWORK

and

ASSOCIATION FOR CONTINUING EDUCATION

Members

AMDAHL CORP.
AMERICAN MICRO-SYSTEMS, INCORPORATED
AMPEX CORPORATION *
ARGO SYSTEMS, INCORPORATED
AVANTEK, INCORPORATED *
BARRY RESEARCH
BECHTEL CORPORATION *
JOHN BLUME AND ASSOCIATIONS
DIVERSIFIED ELECTRONICS
ELECTRO-MAGNETIC SYSTEMS LABORATORIES *
FAIRCHILD CORPORATION
FLUOR-UTAH
GENESYS SYSTEMS, INCORPORATED *
GTE-SYLVANIA *
HEWLETT-PACKARD CORPORATION *
HYDROCOMP, INCORPORATED
INTERNATIONAL BUSINESS MACHINES *
KENNEDY ENGINEERS
LAWRENCE LIVERMORE LABORATORIES *
LOCKHEED MISSILES AND SPACE COMPANY *
NASA/AMES RESEARCH CENTER *
NATIONAL SEMICONDUCTOR *
PACIFIC GAS & ELECTRIC COMPANY *
PHILCO-FORD CORPORATION *
QUANTIC INDUSTRIES, INCORPORATED
SANDIA LABORATORIES *
SINGER-SIMULATION PRODUCTS DIVISION *
STANDARD OIL OF CALIFORNIA *
STANFORD RESEARCH INSTITUTE *
SYSTEMS CONTROL
TELEDYNE MICROWAVE
VIDAR CORPORATION *
WATKINS-JOHNSON *
XEROX, PALO ALTO RESEARCH CENTER *

EDUCATIONAL MEMBERS

COLLEGE OF NOTRE DAME
GOLDEN GATE UNIVERSITY
SAN JOSE STATE UNIVERSITY *
STANFORD UNIVERSITY *

* EQUIPPED WITH TELEVISION CLASSROOMS

NETWORK STAFF

The Network is a function of the Stanford School of Engineering, headed by Dean William M. Kays. Associate Dean L. Farrell McGhie has overall responsibility for the Honors Cooperative Program and the Instructional Television Network. The Network is operated by a full-time staff of five, complemented by 28 student technical directors, two student engineers and five student videotape recorder operators.

Kenneth S. Down	Director
Christina R. Moughamian	Secretary
Roger J. Furner	Chief Engineer
Dennis P. Davie	Broadcast Engineer
James S. Burako	Courier (½ time)
Terry W. Egan	Courier (½ time)

For further information please write or call:

Mr. Kenneth S. Down
Director
Stanford Instructional Television Network
401 Durand Building
Stanford, California 94305
(415) 321-2300 Extension 3616